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APPLICATION NO.		FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/900,160	07/09/2001		Kia Silverbrook	YU128US	6620	
24011	7590	10/19/2006		EXAMINER		
SILVERB 393 DARL		RESEARCH PT	ALANKO, ANITA KAREN			
BALMAIN				ART UNIT	PAPER NUMBER	
AUSTRAL	ÍA			1765		
				DATE MAILED: 10/19/2000	DATE MAILED: 10/19/2006	

Please find below and/or attached an Office communication concerning this application or proceeding.

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	Application No.	Applicant(s)	7
	09/900,160	SILVERBROOK, KIA	\
Office Action Summary	Examiner	Art Unit	
	Anita K. Alanko	1765	
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address	
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tir will apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE	N. nely filed the mailing date of this communication. (D (35 U.S.C. § 133).	
Status			
 1) ☐ Responsive to communication(s) filed on election 2a) ☐ This action is FINAL. 2b) ☐ This 3) ☐ Since this application is in condition for alloware closed in accordance with the practice under Expression 	action is non-final. nce except for formal matters, pro		
Disposition of Claims		l	
4) ☐ Claim(s) 1-9 is/are pending in the application. 4a) Of the above claim(s) 4-9 is/are withdrawn is 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-3 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or			
Application Papers			
9) The specification is objected to by the Examine 10) The drawing(s) filed on is/are: a) acce Applicant may not request that any objection to the G Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Ex	epted or b) objected to by the drawing(s) be held in abeyance. Se ion is required if the drawing(s) is ob	e 37 CFR 1.85(a). njected to. See 37 CFR 1.121(d).
Priority under 35 U.S.C. § 119			
a) All b) Some * c) None of: 1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the priority documents application from the International Bureau * See the attached detailed Office action for a list	s have been received. s have been received in Applicat rity documents have been receiv u (PCT Rule 17.2(a)).	ion No. <u>09/112,778</u> . ed in this National Stage	
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 7/17/01.	4) Interview Summary Paper No(s)/Mail D 5) Notice of Informal F 6) Other:	ate	

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Election/Restrictions

Applicant's election of Group I, claims 1-3 in the reply filed on 8/8/06 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 1 is rejected under 35 U.S.C. 102(b) as being clearly anticipated by Waggener et al (US 4,733,823).

Waggener discloses a method comprising:

depositing a layer of etch stop material 17 on a front side of a wafer substrate 10 (Fig.4, vol.3, lines 58-61);

etching the substrate up to the etch stop material to define a plurality of nozzle chambers 11 (Fig.1) and so that portions of the etch stop layer define roof walls for respective nozzle chambers (Fig.6); and

etching each said portion to form at least one ink ejection port 13 in each said portion (Fig.8).

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Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 2-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Waggener et al (US 4,733,823) in view of Shimada et al (US 5,802,686).

The discussion of Waggener from above is repeated here.

As to claims 2-3, Waggener fails to disclose an actuator and associated circuitry.

Shimada teaches that a useful inkjet printhead includes a piezoelectric actuator to eject ink from nozzles 108 (Fig.1b). The actuator inherently has associated circuitry so that the printhead is functional. A piezoelectric actuator is useful in combination with a silicon substrate pierced with holes (col.2, lines 51-54), as in Waggener.

It would have been obvious to one with ordinary skill in the art to form an actuator with associated drive circuitry, as cited, in the method of Waggener because Shimada teaches that this is useful for forming inkjet printheads with enhanced durability.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Taub is cited to show etching towards an etch stop layer.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anita K. Alanko whose telephone number is 571-272-1458. The examiner can normally be reached on Mon-Fri until 2:30 pm (Wed until 11:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nadine Norton can be reached on 571-272-1465. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Anita K. Hewho Anita K Alanko Primary Examiner Art Unit 1765